

Appl. No.: 10/651,684
Amdt. Dated: 12/30/2005
Off. Act. Dated: 10/28/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11 (canceled)

12. (currently amended): A system for providing local area wireless communications, comprising:

a content server having power-line communication (PLC) network connectivity;

a device communications module;

a PLC interface associated with said device communications module;

said PLC interface configured for communicating data content over said PLC network with said content server; [[and]]

an ultra-wide band (UWB) wireless communication interface associated with said device communications module;

said UWB wireless communication interface configured for communicating data content between said PLC interface and a remote device having UWB wireless connectivity;

wherein said content server is configured to operate in a bus master mode when a bus master is not available on said PLC network; and

means for allocating bandwidth to devices communicating over said PLC network when said content server operates in said bus master mode;

wherein said content server operating in a bus master mode comprises a computer processor and programming executable on said computer processor for carrying out the operations of,

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dividing the available bandwidth of the physical power-line communication network into assignable units.

categorizing content streams that are to be communicated over the physical power-line communication network into priority groups,

assigning units of bandwidth to said priority groups in response to the bandwidth requirements of said content streams and the transmission priority of said priority group, and

assigning specific units of bandwidth to specific content streams within each of said priority groups in response to an equitable sharing of bandwidth on said physical power-line communications network.

13. (original): A system as recited in claim 12, wherein said content server and said device communications modules include means for unit addressing of said device communications modules within said PLC network.

14. (original): A system as recited in claim 13, wherein said unit addressing comprises unit address information for a destination unit or unit address information from a source unit.

15. (original): A system as recited in claim 13, wherein said means for unit addressing is configured to enable communication within a specific portion of the bandwidth allocated to a given device communication module.

16. (original): A system as recited in claim 12, wherein said content server is configured for recording content received over said PLC network.

17. (original): A system as recited in claim 12, wherein said content server is configured for transmitting content played from a storage media over said PLC network.

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Claims 18-19 (canceled)

20. (currently amended): A system for providing local area wireless communications, comprising: as recited in claim 19,
a content server having power-line communication (PLC) network connectivity;
a device communications module;
a PLC interface associated with said device communications module;
said PLC interface configured for communicating data content over said PLC network with said content server; and
an ultra-wide band (UWB) wireless communication interface associated with said device communications module;
said UWB wireless communication interface configured for communicating data content between said PLC interface and a remote device having UWB wireless connectivity;
wherein said content server is configured to operate in a bus master mode when a bus master is not available on said PLC network; and
means for allocating bandwidth to devices communicating over said PLC network when said content server operates in said bus master mode;
wherein said content server operating in a bus master mode comprises a computer processor and programming executable on said computer processor for carrying out the operations of,
dividing the available bandwidth of the physical power-line communication network into assignable units,
categorizing content streams that are to be communicated over the physical power-line communication network into priority groups,
assigning units of bandwidth to said priority groups in response to the bandwidth requirements of said content streams and the transmission priority of said priority group, and

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assigning specific units of bandwidth to specific content streams within each of said priority groups in response to an equitable sharing of bandwidth on said physical power-line communications network;

wherein said bandwidth within a given priority group is assigned by said content server operating in said bus master mode on an as-needed basis to device communications modules utilizing up to their equal share of bandwidth within said given priority group, with additional available bandwidth being equally divided between virtual networks with unfulfilled bandwidth requests.

21. (currently amended): A system as recited in claim 20 [[12]], further comprising means associated with said device communications module for communicating over said PLC network within an allocated bandwidth.

22. (original): A system as recited in claim 21, wherein said means for communicating within said allocated bandwidth comprises an allocation control circuit associated with said device communications module which is configured to communicate data content only within bandwidth portions allocated by a bus master configured for allocating bandwidth portions to said device communications module.

23. (original): A system as recited in claim 22:
wherein said allocation control circuit is configured to request bandwidth from said bus master; and
wherein said allocation control circuit is configured to utilize bandwidth portions for communicating data streams as dictated by said bus master.

24. (original): A system as recited in claim 23, wherein said bandwidth request from said allocation control circuit is transmitted to said bus master prior to said device communications module transmitting data content over said PLC network.

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25. (currently amended): A system as recited in claim 20 ~~[[12]]~~, wherein said PLC interface is configured for encrypting data content transmitted over said PLC network and decrypting data content received over said PLC network.

Claims 26-31 (canceled)